

## REMARKS

### I. PENDING CLAIMS AND SUPPORT FOR AMENDMENTS

Upon entry of this amendment, claims 1-4 and 6-31 will be pending in this application. Claim 5 has been canceled. Claims 7-31 have been withdrawn from consideration by the Examiner as directed to a nonelected invention. Accordingly, claims 1-4 and 6 are presently undergoing examination on the merits.

Applicant has amended claim 1 to correct typographical errors and to incorporate the limitations of claim 5, an original claim. Additional support for this amendment can be found in the specification at page 8, lines 6-9. No new matter has been added.

### II. RESTRICTION REQUIREMENT

Applicant respectfully requests that claims 13-31, directed to methods of using the compositions of claim 1, be rejoined to claims 1-4 and 6 when allowable subject matter has been indicated. If the composition of claims 1-4 and 6 is allowable, then the methods of using it claimed in claims 13-31 must also, by definition, be allowable, and would therefore not present any undue burden on examination. The only purpose served by insisting upon restriction of these claims would be to require the filing of yet another divisional application, adding to the workload of the already overburdened Patent and Trademark Office.

### III. INFORMATION DISCLOSURE STATEMENT

The Examiner has refused consideration of EP 0151936, WO 9606814, and Hawley's Condensed Chemical Dictionary, because copies were not provided with the Information Disclosure Statement. MPEP § 609 states:

There are exceptions to this requirement that a copy of the information must be provided. First, 37 C.F.R. § 1.98(d) states that a copy of any patent, publication, pending U.S. application, or other information listed in an information disclosure statement is not required to be provided if: (1) the information was previously cited by or submitted to, the Office in a prior application, provided that the prior application is properly identified in the IDS and is relied on for an earlier filing date under 35 U.S.C. § 120; and (2) the IDS submitted in the earlier application complies with 37 C.F.R. § 1.98 (a) – (c). If both of these conditions are met, the examiner will consider the information previously cited or submitted to the Office and considered by the Office in a prior application relied on under 35 U.S.C. § 120.

If the Examiner will review the Information Disclosure Statement submitted by Applicant in this application, she will note that it complies with the above requirements. The Examiner has not alleged any basis for noncompliance with the provisions of 37 C.F.R. § 1.98(d) as set forth above. Accordingly, Applicant respectfully requests that the Examiner consider the above three references and make them of record.

### IV. ANTICIPATION REJECTIONS

#### A. Honna et al.

In paragraph 5 of the Office action, the Examiner has rejected claims 1-3 and 6 as anticipated under 35 U.S.C. § 102(e) over Honna et al. (U.S. Published Application

2003/0075479). Applicant respectfully traverses this rejection and requests reconsideration and withdrawal thereof.

Honna et al. disclose a hydrocracking catalyst, not a purification material as recited in Applicant's claims. Moreover, Honna et al. recite that the ultrafine metal oxide particles have a particle diameter of 5-10 nm, far below the lower limit of 1  $\mu$ m recited in Applicant's claims. For this reason, Honna et al. does not anticipate Applicant's claims. Because Honna et al. does not anticipate Applicant's claims, the anticipation rejection should be withdrawn.

B. WO 01/90280

In paragraph 6 of the Office action, the Examiner has rejected claims 1 and 4 as anticipated by WO 01/90280 ("the '280 publication"). Applicant respectfully traverses this rejection and requests its reconsideration and withdrawal.

The '280 publication, in similar manner to Honna et al., disclose a catalytic cracking catalyst, not a fluid purification material. Moreover, the '280 publication suffers from a similar deficiency to that of Honna et al., namely that the '280 publication completely fails to disclose any particle size for the metal oxide. The examples referenced by the Examiner are completely silent on this. Accordingly, the '280 publication cannot anticipate the claims, and this rejection should be withdrawn.

V. OBVIOUSNESS REJECTION

In paragraph 8 of the Office action, the Examiner has rejected claim 5 under 35 U.S.C. § 103(a) as obvious over Honna et al. Applicant respectfully traverses this rejection and requests its reconsideration and withdrawal.

The Examiner alleges that the only difference between the disclosure of Honna et al. and the claims is that Honna et al. does not disclose the particle size of the catalyst composition, and that “changes in size of a composition or device are not sufficient patentably distinguish over the prior art. *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955).”

The Examiner’s reasoning is inapplicable to the present situation. First, the case cited by the Examiner related to a claim limitation that a package be of appreciable size and weight so as to require handling by a lift truck, as opposed to prior art packages that could be lifted by hand. *See In re Rose*, 105 USPQ 237, 240 (CCPA 1955). Nowhere does *Rose* hold, or even suggest, that a difference in size of a catalytic particle (or of a purification particle) was automatically obvious. The cited case simply does not state what the Examiner alleges it states.

Second, Honna et al. itself teaches away from modifying its teachings in such a way as to fall within the scope of Applicant’s claims. Honna et al. state that:

the present invention provides a catalyst support comprising a zeolite having an Al/Si atomic ratio of 0.01-0.1 and mesopores having a pore diameter in the range of 5-30 nm, and ultrafine particles composited to inside walls of the mesopores . . . .

*See* Honna et al., paragraph [0006] (emphasis added). The size of the ultrafine particles must be sufficiently small to fit within the mesopores, which is why in paragraph [0019] Honna et al. state “[t]he ultrafine particles generally have a particle diameter of 5-10 nm and are preferably as uniform as possible in size.” One of ordinary skill in this art would realize that if they increased the size of the ultrafine

particles past 30 nm, the particles would no longer fit inside the mesopores, and could therefore no longer be composited to their inside walls. This would effectively destroy the invention of Honna et al., and constitutes a teaching away from such a modification. One of ordinary skill in this art would therefore never have been motivated to produce a material having the particle sizes recited in Applicant's claims. Applicant respectfully submits that, for at least this reason, the Examiner has failed to establish a *prima facie* case of obviousness, and the rejection should be withdrawn.

## CONCLUSION

Applicant's claims are clear and definite, fully supported by an adequate and enabling written description, and define novel and nonobvious subject matter. As a result, they are in condition for immediate allowance, and an early notification to that effect is earnestly solicited.

The Commissioner is hereby authorized to charge any deficiencies or credit any overpayment to Deposit Order Account No. 11-0855.

Respectfully submitted,



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